

SPECIAL RESOURCE SECTION

**Missouri Department of Elementary and Secondary Education
Division of Special Education
SPECIAL EDUCATION
ANNUAL PROGRAM EVALUATION MODEL AND GUIDE**

**SPECIAL RESOURCE SECTION
Data Drill Down Process**

DOCUMENT 1: DATA ANALYSIS EXAMPLES (for use in component B3)

Drill Down Process of Analysis

Introduction:

Data analysis is a process that requires sound procedures as well as specific and appropriate criteria to determine what are perhaps strengths and what are perhaps concerns. Furthermore, data analysis, for the purposes of performance evaluation of program goals, requires not only knowing what data are available but how to best use it. Analysis of data requires movement from the general to the specific i.e. from what to why specifically. For example, you have MAP mathematics results of IEP students in your Special Education District Profile. This tells you what the overall results were but is limited in that it does not tell you *why* IEP students are or are not achieving or which groups of IEP students are or are not achieving based on criteria set by the district. Determining why requires a more thorough analysis via drilling down for more specific information. An approach to conducting this process is exemplified in the next section.

Identify program goal to be evaluated.

- Begin by identifying the district level program goal to be evaluated. We provide two examples – one student achievement performance goal and one transition performance goal. For the first example, we chose to use Performance Goal C of the State's Performance Goals and Indicators which deals with increasing MAP performance, and for the second example we chose to use Performance Goal E which deals with decreasing the dropout rate. Note that analysis of Performance Goal C can be compared to the processes used in both the district case studies described in *Document 4: District Case Studies*.

Collect information needed and analyze district performance in meeting program goal.

- To complete a drill down process of analysis of performance, Table I and Table II on the next two pages were used to list district information available, needed, collected and analyzed, i.e. the facts/data and any questions to be answered with regard to Performance Goal C (Example 1). This same process for Performance Goal E follows in Example 2. For both examples:
 - A multi-disciplinary team approach was utilized for all seven steps.
 - The multiple measures of data chosen to evaluate Performance Goal C were drawn from *Document 2: Listings of Data for Consideration*.
 - *Document 3: Questions to Facilitate Thinking Processes to Get to "Why"* was used to guide thinking during each step in the process.
 - Fillable forms to use for your own district's data analysis may be found in Appendix C and Appendix D. Appendix C is Table I and Table II. Appendix D is a template that your district can use to create graphs to analyze some of your data. Be mindful that when charts or graphs are used, the data should also be included, either in a separate table or in the chart or graph and to the extent possible at least three years of data. The fillable forms in Appendices C and D can provide supporting documentation to this as well as any other improvement related plan or endeavor.

Data Analysis – Drill Down Process: EXAMPLE 1 – Student Achievement

- **PERFORMANCE GOAL C:** The percentage of students with disabilities scoring at the Step 1 and Progressing achievement levels will decrease, while the percentage of students with disabilities scoring at the Proficient and Advanced achievement levels will increase for each of the MAP subject area assessments.

TABLE I: STEPS FOR “WHAT”			
WHAT	Step No.	Description	Facts/Data/Questions Examined by Team
	STEP 1	Collect Data Needed to Evaluate Program Goal (presently available). (See Document 2: Listings of Data for Consideration for a listing of data and potential places to find data)	<p>?Demographics:</p> <ul style="list-style-type: none"> o Child Count/Placement Data o Attendance Data <p>?School Processes:</p> <ul style="list-style-type: none"> o None reviewed (best practice is to have data but may review readily available data first then think about and identify this kind of data which is needed for a more thorough analysis) <p>?Student Learnings:</p> <ul style="list-style-type: none"> o MAP Data - Special Education District Profile o MAP Data - Special Education and All (Crystal Reports) o Classroom Assessment Data <p>?Perceptions:</p> <ul style="list-style-type: none"> o None reviewed (best practice is to have data but may review readily available data first then think about and identify this kind of data which is needed for a more thorough analysis)
	STEP 2	Examine Data and Consider What To Look for: <ul style="list-style-type: none"> • Look at targets and benchmarks including trends • Look at emergent trends • Compare/contrast within and between groups/subgroups (Refer to: ✓ Appendix D - Templates for Graphing Your Data for assistance in graphing particular data. ✓ Document 3: Questions to Facilitate Thinking Processes to Get to “Why”)	<p>? Targets and benchmarks for goal met or exceeded – why and why not?</p> <p>? Trends demonstrating goal is met or exceeded – why and why not?</p> <p>? Similarities/differences between disabled and non-disabled – why and why not?</p>
	STEP 3	Consider Compliance Implications and Identify Concerns	<p>? Trend consistently at criteria level/floor (i.e. minimum acceptable level)? Why?</p> <p>? No movement in trend (i.e. consistently at or below criteria level/floor)? Why?</p> <p>? Trend movement in wrong direction? Why?</p>

Demographics, Student Learnings, School Processes and Perceptions from Victoria L. Bernhardt’s *Data Analysis for Comprehensive Schoolwide Improvement*, Eye on Education, Inc. 6 Depot Way West, Larchmont, NY 10538 (1998)

➤ NEXT STEPS: After completing Steps 1-3, proceed to Table II on the next page to get to “why.”

Data Analysis – Drill Down Process: EXAMPLE 1 – Student Achievement

TABLE II: STEPS FOR “WHY”

WHY	Step No.	Description	Facts/Data/Questions Examined by Team	
	STEP 4	Identify Other Measures/Questions to Consider (possible root causes based on data) (See Document 2: Listings of Data for Consideration for a listing of data and potential places to find data)	<u>?Demographics:</u> <ul style="list-style-type: none"> o disability diagnosis o placements o building information <u>?Student Learnings:</u> <ul style="list-style-type: none"> o other assessment results (district and building level) 	<u>?School processes:</u> <ul style="list-style-type: none"> o inclusion practices (access to regular curriculum) currently and previously <u>?Perceptions:</u> <ul style="list-style-type: none"> o Parent beliefs from survey: Can IEP students increase performance? Why or why not?
	STEP 5	Drill Down Data, Analyze and Consider Implications (Refer to Document 3: Questions to Facilitate Thinking Processes to Get to “Why”)	<u>Questions Considered:</u> <ul style="list-style-type: none"> ? Which disability categories of students are doing the best or worst and at which grade levels? Why and why not? ? How do placement categories compare with grade level results? Do IEP students have access to the regular education classroom for facilitating appropriate development, i.e. cognitive, educational, etc.? ? Which grades are doing the best, doing the worst and why? 	<u>Implications Considered:</u> <ul style="list-style-type: none"> ? 7th grade MAP mathematics and science scores of students with disabilities are not increasing. ? 3rd grade MAP scores of students with disabilities are increasing and are significantly above the minimum criterion level in all content areas. ? Current placements (all ages) provide access to regular education curriculum.
	STEP 6	Identify Gaps/Additional Information Needed (not presently available) <i>PLEASE NOTE: There are ALWAYS gaps in information needed to complete an analysis. What additional information is needed to form a conclusion and develop strategies for improvement? Think of a way to collect those information e.g. formal or informal observations, surveys/questionnaires, etc.</i>	<u>Questions Considered:</u> <ul style="list-style-type: none"> ? Match between instruction and performance-what is being taught and on what specifically do students with disabilities and all students perform substandard? Perform well? Why and why not? ? What is the percent MAP oral accommodation usage? Percent participation (i.e. Level Not Determined?) 	<u>Implications Considered:</u> <ul style="list-style-type: none"> ? Which 7th grade MAP mathematics and science skill areas and/or test items are consistently substandard? Which are meeting or exceeding expectations? Why and why not? ? Why do a high percentage of parents of 7th graders believe more time in special education placements will increase student achievement?
	STEP 7	Determine Conclusions (based on analysis of information gathered and analyzed for Steps 1-6)	<ul style="list-style-type: none"> ? 7th graders (IEP) are performing more poorly on test items involving graphs and tables in all content areas tested. ? Trend data for 7th graders indicate high percents in more restrictive placements in previous years. 	<ul style="list-style-type: none"> ? Current placement data for 7th graders indicate high percent have access to the regular education curriculum, but instructional practices do not teach/re-teach using tables and graphs. ? Parents’ (of 7th graders) belief in more restrictive placements appear to be due to more restrictive placements in previous years.

Demographics, Student Learnings, School Processes and Perceptions from Victoria L. Bernhardt’s *Data Analysis for Comprehensive Schoolwide Improvement*, Eye on Education, Inc. 6 Depot Way West, Larchmont, NY 10538 (1998)

➤ NEXT STEPS: After completing Steps 1-7, you should now be prepared to evaluate other goals or to proceed to Process & Guidelines Section: Component B4.

Data Analysis – Drill Down Process: EXAMPLE 2 – Transition

- **PERFORMANCE GOAL E:** The percentage of students with disabilities that Dropout of school will decrease.

TABLE I: STEPS FOR “WHAT”			
WHAT	Step No.	Description	Facts/Data/Questions Examined by Team
	STEP 1	Collect Data Needed to Evaluate Program Goal (presently available) (See <i>Document 2: Listings of Data for Consideration</i> for a listing of data and potential places to find data)	<div> <u>?Demographics:</u> <ul style="list-style-type: none"> o Dropout Rates - Special Education and All o Graduation Rates - Special Education and All o Child Count/Placement Data </div> <div> <u>?School Processes:</u> <ul style="list-style-type: none"> o District graduation requirements o Vocational course offerings </div> <div> <u>?Student Learnings:</u> <ul style="list-style-type: none"> o Classroom Assessment Data </div> <div> <u>?Perceptions:</u> <ul style="list-style-type: none"> o Teacher expectations about graduating with diploma – special education and all. </div>
	STEP 2	Examine Data and Consider What To Look for: <ul style="list-style-type: none"> • Look at targets and benchmarks including trends • Look at emergent trends • Compare/contrast within and between groups/subgroups (Refer to: ✓ <i>Appendix D - Templates for Graphing Your Data</i> for assistance in graphing particular data ✓ <i>Document 3: Questions to Facilitate Thinking Processes to Get to “Why”</i>)	<p>? Trends demonstrating goal is met or exceeded – why and why not?</p> <p>? Similarities/differences between disabled and non-disabled– why and why not?</p> <p>? Emergent trends in School Processes or Perceptions data</p> <p>? Similarities/differences between groups of students with disabilities– why and why not?</p>
	STEP 3	Consider Compliance Implications and Identify Concerns	<p>? Trend consistently at criteria level (i.e. minimum acceptable level) – why and why not?</p> <p>? No movement in trend (i.e. consistently at or below criteria level) – why and why not?</p> <p>? Trend movement in wrong direction– why and why not?</p>

Demographics, Student Learnings, School Processes and Perceptions from Victoria L. Bernhardt's *Data Analysis for Comprehensive Schoolwide Improvement*, Eye on Education, Inc. 6 Depot Way West, Larchmont, NY 10538 (1998)

➤ NEXT STEPS: After completing Steps 1-3, proceed to Table II on the next page to get to “why.”

Data Analysis – Drill Down Process: EXAMPLE 2 – Transition

TABLE II: STEPS FOR “WHY”

WHY	Step No.	Description	Facts/Data/Questions Examined by Team	
	STEP 4	Identify Other Measures/Questions to Consider (possible root causes based on data) (See Document 2: Listings of Data for Consideration for a listing of data and potential places to find data)	<p><u>?Demographics:</u></p> <ul style="list-style-type: none"> o disability categories o placements o building information o attendance o race/ethnicity o disciplinary incidents (types of removal) <p><u>?Student Learnings:</u></p> <ul style="list-style-type: none"> o MAP performance 	<p><u>?School processes:</u></p> <ul style="list-style-type: none"> o Disciplinary policies o transition skills taught and conveyed to all students o high expectations of all students (i.e. achievement and behavior) <p><u>?Perceptions:</u></p> <ul style="list-style-type: none"> o Parents' & students' belief: IEP students can't be expected to achieve at high performance levels and/or can't be expected to gain viable employment as a result of high school education
	STEP 5	Drill Down Data, Analyze and Consider Implications (Refer to Document 3: Questions to Facilitate Thinking Processes to Get to “Why”)	<p>? Percentage of dropouts by age and by disability</p> <p>? Percentage of dropouts by dropout category and by disability</p> <p>? Highest percentage of dropouts in which disability category(s)? Why?</p> <p>? Highest percentage of dropouts within disability in which disability category(s)? Why?</p> <p>? Most students are dropping out at what ages? Why?</p>	<p>? Dropout rates within each disability category- highest, lowest and why?</p> <p>? Comparison of child count to percentage of dropouts</p> <p>? Do IEP students have access to the regular education classroom for facilitating appropriate development e.g. attitudes and socialization skills?</p> <p>? Discipline rates by type of removal in which disability categories? Why?</p>
	STEP 6	Identify Gaps/Additional Information Needed (not presently available) <i>PLEASE NOTE: There are ALWAYS gaps in information needed to complete an analysis. What additional information is needed to form a conclusion and develop strategies for improvement? Think of a way to collect those information e.g. formal or informal observations, surveys/questionnaires, etc.</i>	<p>? Graduation expectations specified on IEPs? Trends by disability?</p> <p>? What behavior management techniques do teachers use?</p> <p>? What training(s) in behavior management techniques have teachers received?</p>	<p>? What transition skill areas are addressed and implemented successfully on IEPs?</p>
	STEP 7	Determine Conclusions (based on analysis of information gathered and analyzed for Steps 1-6)	<p>? Highest percent of dropouts are LD.</p> <p>? Within disability categories, highest percent of dropouts are ED</p> <p>? Trend data indicate dropout rate significantly increases at age fifteen</p> <p>? Higher percentages of ED and LD students receive OSS as compared to other disabilities and all students</p>	<p>? Teachers attended numerous trainings in various behavior management techniques, but district has not adopted or determined what is best/most appropriate.</p> <p>? Interventions to reduce dropping out need to start prior to age fifteen, especially for ED and LD students.</p>

Demographics, Student Learnings, School Processes and Perceptions from Victoria L. Bernhardt's *Data Analysis for Comprehensive Schoolwide Improvement*, Eye on Education, Inc. 6 Depot Way West, Larchmont, NY 10538 (1998)

➤ NEXT STEPS: After completing Steps 1-7, you should now be prepared to evaluate other goals or to proceed to Process & Guidelines Section: Component B4.

Remarks about the Examples and the Process Used:

Cautions about the Examples: These examples to data analysis are simplified and do not include methods of facilitating and organizing teams to complete the task at hand. Suggested approaches to facilitating these and other related processes, may be found in the works of:

- Bernhardt, Victoria L. *Data Analysis for Comprehensive Schoolwide Improvement*. Larchmont: Eye on Education (1998). ISBN: 1883001579
- Bernhardt, Victoria L. *Data Analysis for Continuous School Improvement*. 2nd ed. Larchmont: Eye on Education (2003). ISBN: 1930556748
- DuFour, Richard and Robert Eaker. *Professional Learning Communities at Work: Best Practices for Enhancing Student Achievement*. Bloomington: National Education Service (1998). ISBN: 1879639602
- Schmoker, Mike. *Results: The Key to Continuous School Improvement*. 2nd ed. Alexandria: Association for Supervision & Curriculum Development; (1999). ISBN: 0871203561

Assistance: If you need assistance, Special Education Consultants are available through the Regional Professional Development Centers (RPDCs) to facilitate program evaluation including, but not limited to, analyzing data, identifying needed instructional practices and identifying needed professional development. To contact the Special Education Consultant for your region, see website links for each RPDC center at <http://dese.mo.gov/divteachqual/leadership/rpdc/index.html>.

Questions or Comments: Any questions or comments regarding the information contained in the *Process & Guidelines Section - Component B3: Evaluation Criteria/Evaluation Procedures/Data Analysis* and related documents in the *Special Resource Section* and *Appendices* may be directed to the Division of Special Education Data Coordination Section at 573-526-0299 or webreplyspedc@dese.mo.gov.

SPECIAL RESOURCE SECTION

Data Drill Down Process

DOCUMENT 2: LISTINGS OF DATA FOR CONSIDERATION

(Data to Compare All Students/Staff with Special Education Students/Staff Where Applicable)

- **Organization of Data Listings** – Data are collected and organized for each improvement planning area (see *Process & Guidelines Section: Requirements for Program Evaluation* pages 2 and 3 for further information) based on Demographics, Student Learnings, School Processes and Perceptions, from Victoria L. Bernhardt's *Data Analysis for Comprehensive Schoolwide Improvement*, Eye on Education, Inc. 6 Depot Way West, Larchmont, NY 10538 (1998). Please note - some data can go under more than one category contingent upon use.

Definitions for these categories are as follows (Bernhardt) :

- Demographics (typically quantitative data) – population characteristics.
 - Student Learnings (typically quantitative data) - student achievement as measured by formal and informal assessment instruments.
 - School Processes (qualitative and quantitative data) - how the processes of education are carried out via programs, procedures and decisions. These include but are not limited to policies, instruction, course offerings, interpersonal and group dynamics, delegation of responsibility, etc.
 - Perceptions (typically qualitative data) - opinions, beliefs and judgments.
- **Locating and/or Gathering Data** – Multiple measures of building level data are available from your school district including those which you aggregate to a district level for reporting to the Core Data Collection System. Note that other data needed to complete a comprehensive analysis may need to be gathered or collected by your school district. Places to find multiple measures of data and information are listed below.
 - Places to Find Multiple Measures of Data and Information:
 - ✓ School building level data collected by the district or the building
 - ✓ School district data at the student level collected by building to be reported to Core Data Collection System (including, but not limited to, screens 8, 9, 11, 12, 13, 14, 18 and 20)
 - ✓ MAP Clear Access/Crystal Reports
 - ✓ Special Education State and District Profiles
 - ✓ IEP Present Level of Performance from individual student IEPs
 - ✓ School Entry Profile (where available or other school entry/early childhood assessments)
 - ✓ Special Education Monitoring/Compliance Report
 - ✓ District Off Grade Assessments (i.e. Terra Nova, SAT 10, etc.)
 - ✓ District Common Benchmark Assessments; any district assessments
 - ✓ MSIP Report
 - ✓ District Comprehensive School Improvement Plan (CSIP)
 - ✓ Comprehensive Building Improvement Plans (CBIPs)
 - ✓ District Comprehensive System of Professional Development Plan (CSPD)
 - Other Potential Places to Find Multiple Measures of Data and Information:
 - ✓ 2003 Missouri KIDS COUNT Data Book Online at <http://osedata.missouri.edu/kidscount/03/>
 - ✓ Office of Social and Economic Data Analysis at <http://www.oseda.missouri.edu/>
 - ✓ IDEA Data at <http://www.ideadata.org/>
 - ✓ National Center for Education Statistics at <http://www.nces.ed.gov/>
 - ✓ NCLB School Results Data at <http://www.SchoolResults.org/>

Data listings for performance goal areas of School Entry, Student Achievement and Transition follow.

LISTINGS OF DATA FOR CONSIDERATION (Data to Compare All Students/Staff with Special Education Students/Staff Where Applicable):

Performance Goal: School Entry

A. The performance level of children who receive special education services prior to age five will increase on the School Entry Profile

SCHOOL ENTRY DATA*			
Demographics	Student Learnings	School Processes	Perceptions
<ul style="list-style-type: none">• Early Childhood Child Count by Disability and/or by Age• Early Childhood Special Education Placement Totals• Early Childhood Race/Ethnicity• Early Childhood Age Breakdown• Staff/Educator:<ul style="list-style-type: none">◦ Attendance (District & Building)◦ Staff/Educator Turnover Rate◦ Educator Vacancy; initial vacancies, appropriately certified, vacant all year• Student Attendance for Special Education Students and for All Students (District & Building)	<ul style="list-style-type: none">• Pre-Kindergarten School Readiness Assessments, i.e. School Entry Profile (district level data available 2004-2005 school year), KIDS, AGS, etc.• Kindergarten Level Assessments (district and/or building)• District level assessment of ECSE outcomes• MAP Scores (IEP and All by District, Building & Student)<ul style="list-style-type: none">◦ MAP Alternate◦ Reading, Mathematics, and Communication Arts Achievement◦ MAP Assessment Data by Content and Grade Level and/or by Disability	<ul style="list-style-type: none">• Model of program delivery utilized• Coop vs. independent program• Integration with non-disabled peers	<ul style="list-style-type: none">• Focus Groups• Interviews (unbiased formal and/or informal instrument)• Observations (unbiased formal and/or informal instrument)• Questionnaires/Surveys: Student, Parent, Teacher, Administrator

Demographics, Student Learnings, School Processes and Perceptions from Victoria L. Bernhardt's *Data Analysis for Comprehensive Schoolwide Improvement*, Eye on Education, Inc. 6 Depot Way West, Larchmont, NY 10538 (1998)

*Note: This listing is not mutually exclusive and exhaustive.

LISTINGS OF DATA FOR CONSIDERATION (Data to Compare All Students/Staff with Special Education Students/Staff Where Applicable):

Performance Goals: Student Achievement

B. The percentage of students with disabilities in Grade 3 and 7 who are proficient readers will increase, while the percentage that have Missouri Assessment Programs - Communication Arts (MAP-CA) read to them will decrease.

C. The percentage of students with disabilities scoring at the Step 1 and Progressing achievement levels will decrease, while the percentage of students with disabilities scoring at Proficient and Advanced will increase for each of the MAP subject area assessments.

STUDENT ACHIEVEMENT DATA*			
Demographics	Student Learnings	School Processes	Perceptions
<ul style="list-style-type: none"> • Discipline Incidents by Type of Removal for Special Education and All Students (In-School, Out-of-School, Expulsions, Office Referrals) • Discipline Incidents for Special Education and All Students (Multiple short sessions, 10 Consecutive Days, Greater than 10 days, 45 Calendar Day Placements) • Free/Reduced Lunch Rate (District & Building) • Percent of Students Represented at Parent Teacher Conferences • Race/Ethnicity for Special Education Students and for All Students (District & Building) • Special Education Child Count, Placement and Incidence Rates by Disability and/or by Age • Special Education Early Childhood & School Age Placement Totals • Special Education Early Childhood & School Age Placement by Disability and/ or by Age • Staff/Educator: <ul style="list-style-type: none"> ○ Attendance (District & Building) ○ Staff/Educator Turnover Rate ○ Educator Vacancy; initial vacancies, appropriately certified, vacant all year • Student Attendance for Special Education Students and for All Students (District & Building) 	<ul style="list-style-type: none"> • District and/or Building Assessment Scores; reading, mathematics, communication arts (Elementary, Middle, High School) • Kindergarten Level Assessments (district and/or building) • MAP Scores (IEP and All by District, Building & Student) <ul style="list-style-type: none"> ○ MAP Alternate ○ Reading, Mathematics, and Communication Arts Achievement ○ MAP Assessment Data by Content and Grade Level and/or by Disability ○ Pre-Kindergarten School Readiness Assessments, i.e. School Entry Profile (district level data available 2004-2005 school year), KIDS, AGS, etc. 	<ul style="list-style-type: none"> • Child Complaints; number, frequency, type, resolution (Special education students) • Disciplinary Policies • Inclusion practices: least restrictive environment, access to regular education, etc. • Number of Staff Recognitions per Quarter • Number of Student Recognitions per Quarter • Professional Development: percent of staff participating in high-quality staff development during the year • Special Education Referrals: Number of Referrals Accepted, Number of Referrals Placed • Student Service Team (SST) Referrals Resulting in Special Education Referral, Resulting in Placement • Staff Recruitment and Retention; hiring practices, organizational dynamics, working conditions, supervisory/management techniques, support systems, training, etc. • Transition planning practices: IEP, consultation, implementation, access, opportunities, etc. • MAP Oral Reading Accommodations 	<ul style="list-style-type: none"> • Complaints (parent, student, staff, etc.); number, frequency, type, resolution • Focus Groups • Interviews (unbiased formal and/or informal instrument) • Observations (unbiased formal and/or informal instrument) • Questionnaires/Surveys: Student, Parent, Teacher, Administrator

Demographics, Student Learnings, School Processes and Perceptions from Victoria L. Bernhardt's *Data Analysis for Comprehensive Schoolwide Improvement*, Eye on Education, Inc. 6 Depot Way West, Larchmont, NY 10538 (1998)

*Note: This listing is not mutually exclusive and exhaustive.

LISTINGS OF DATA FOR CONSIDERATION (Data to Compare All Students/Staff with Special Education Students/Staff Where Applicable):

Performance Goals: Transition

D. The percentage of students with disabilities graduating with a regular diploma will increase.

E. The percentage of students with disabilities that Dropout of school will decrease.

F. The percentage of students with disabilities participating in vocational preparation programs is consistent with the percentage of participation in the general population of students.

G. The percentage of students with disabilities employed or enrolled in continuing education six months post vocational training will increase or be maintained at a high level.

H. The percentage of students with disabilities employed or enrolled in continuing education six months post graduation will increase or be maintained at a high level.

TRANSITION DATA*			
Demographics	Student Learnings	School Processes	Perceptions
<ul style="list-style-type: none"> • A+ Participation: number 9-12, number of graduates • ACT: Number taking test • Advanced Placement: number of students enrolled(unduplicated), number who took the exam • Discipline Incidents by Type of Removal for Special Education and All Students (In-School, Out-of School, Expulsions, Office Referrals) • Discipline Incidents for Special Education and All Students (Multiple short sessions, 10 Consecutive Days, Greater than 10 days, 45 Calendar Day Placements) • Dropout Numbers/Rate for Special Education Students and for All Students • Dropout Numbers/Rates for Special Education Students by Disability, Age and/or Dropout Category (i.e. Received Certificate, Moved, Not Known To Be Continuing, Reached Maximum Age, and Dropped Out) • Dual Credit: number of students enrolled (unduplicated) • Duration in special education (from date of initial diagnosis to current year) • Free/Reduced Lunch Rate (District & Building) • Grade Distribution by Grade Level and subject (MS&HS) (especially failing grades) • Grade Distribution: Algebra 1 & English 9 	<ul style="list-style-type: none"> • ACT: composite score, % scoring at or above the national average • ACTs PLAN Assessment: % scoring at or below the national median • Average Senior GPA • District and/or Building Assessment Scores; reading, mathematics, communication arts (Elementary, Middle, High School) • Dual Credit, number passing • MAP Scores (IEP and All by District, Building & Student) <ul style="list-style-type: none"> ○ MAP Alternate ○ Reading, Mathematics, and Communication Arts Achievement ○ By subject and grade level • PSAT: optional • SAT: Advanced Placement: number scoring 3,4 or 5 on exam • Vocational course grades 	<ul style="list-style-type: none"> • A+ Participation: number 9-12, number of graduates • Vocational Course Offerings (HS): number of courses, number enrolled, number completing and % placed • Child Complaints; number, frequency, type, resolution (Special education students) • Disciplinary Policies • Inclusion practices: least restrictive environment, access to regular education, etc. • Number of Staff Recognitions per Quarter • Number of Student Recognitions per Quarter • Professional Development: percent of staff participating in high-quality staff development during the year • Special Education Referrals: Number of Referrals Accepted, Number of Referrals Placed 	<ul style="list-style-type: none"> • Complaints (parent, student, staff, etc.); number, frequency, type, resolution • Focus Groups • Interviews (unbiased formal and/or informal instrument) • Observations (unbiased formal and/or informal instrument) • Questionnaires/Surveys: Student, Parent, Teacher, Administrator

Demographics, Student Learnings, School Processes and Perceptions from Victoria L. Bernhardt's *Data Analysis for Comprehensive Schoolwide Improvement*, Eye on Education, Inc. 6 Depot Way West, Larchmont, NY 10538 (1998)

Transition Data Table is continued on next page.

*Note: This listing is not mutually exclusive and exhaustive.

LISTINGS OF DATA FOR CONSIDERATION (Data to Compare All Students/Staff with Special Education Students/Staff Where Applicable):

This table is continued from previous page.

TRANSITION DATA*			
Demographics	Student Learnings	School Processes	Perceptions
<ul style="list-style-type: none"> • Graduation Follow-Up for Special Education Students and for All Students : 4 yr, 2 yr, non college, military, employment, unknown, other • Graduation Numbers/Rates for Special Education Students and for All Students • Graduation Numbers/Rates for Special Education Students by Disability and/or Age • Mobility Rate; Transfer Ins, Transfer Outs, Enrolled All Year • Percent of Students Represented at Parent Teacher Conferences • Race/Ethnicity for Special Education Students and for All Students (District & Building) • Special Education Child Count, Placement and Incidence Rates by Disability and/or by Age • Special Education School Age Placement by Disability and/ or by Age • Staff/Educator: <ul style="list-style-type: none"> ○ Attendance (District & Building) ○ Staff/Educator Turnover Rate ○ Educator Vacancy; initial vacancies, appropriately certified, vacant all year • Student Attendance for Special Education Students and for All Students (District & Building) 	See previous page	<ul style="list-style-type: none"> • Student Service Team (SST) Referrals Resulting in Special Education Referral, Resulting in Placement • Staff Recruitment and Retention; hiring practices, organizational dynamics, working conditions, supervisory/management techniques, support systems, training, etc. • Transition planning practices: IEP, consultation, implementation, access, opportunities, etc. 	See previous page

Demographics, Student Learnings, School Processes and Perceptions from Victoria L. Bernhardt's *Data Analysis for Comprehensive Schoolwide Improvement*, Eye on Education, Inc. 6 Depot Way West, Larchmont, NY 10538 (1998)

*Note: This listing is not mutually exclusive and exhaustive

SPECIAL RESOURCE SECTION

Data Drill Down Process

DOCUMENT 3: QUESTIONS TO FACILITATE THINKING PROCESSES TO GET TO “WHY”:

1. What patterns or trends appear? Can they be explained and if so how?
2. What important ideas seem to pop out?
3. Are there results that are different from what you expected? What seems unexpected?
4. How do data from multiple sources (demographics, school processes, student learnings, and perceptions) compare or contrast?
5. What strengths can be identified?
6. What do the data seem to tell us?
7. What do the data not tell us? What else do we need to know?
8. What inferences might we make from the data?
9. How might we explain these data? Why?
10. How do these data compare with what we would hope to see in these areas? Why?

SPECIAL RESOURCE SECTION

Data Drill Down Process

DOCUMENT 4: DISTRICT CASE STUDIES:

The following two cases represent two actual situations where drill down processes were used (the names of the districts were changed to respect their privacy).

The Numbers Didn't Add Up

Mt. Carver, a medium sized district, typifies the majority of districts of comparable size with respect to child count and resources available. On their most recent Special Education Compliance Monitoring Review, they failed to meet the minimum criterion level for MAP in the area of reading for students with disabilities. Administrators were baffled since the scores of most students had increased over the last couple of years as the district had strived to ensure all students had access to the regular curriculum. What went wrong and why?

A multi-disciplinary team convened to begin to identify what data they wanted to review so that they could set goals for improvement. They decided they needed to look beyond aggregate district MAP reading scores. They began by looking at *school learnings*¹ data such as various subgroup MAP reading data, including IEP students. They pulled MAP reading data by building and were able to target the lowest scoring building. They looked at building level student *demographic* data, including their disability eligibility categories and placements and disciplinary incidents by type of removal and attendance. Since disciplinary incidents data suggested no problems were evident, the team examined *school process* data relative to inclusion practices, i.e. how IEP teams were determining placements and why. Finally they looked at *perceptions* data, i.e. child complaints by type and frequency and MSIP Advanced Questionnaire data. The information gathered from all the measures allowed the team to determine how much or how little access students had to the general education curriculum.

From this point, the district team asked additional probing questions about the curriculum, delivery of instruction, and how students were prepared for the assessment. This district drilled down their data until they found the root causes for the district's poor MAP reading performance. By looking at the data from all multiple measures, the district was able to determine with some degree of certainty the reasons for poor performance in reading for students with disabilities. This process provided guidance for the development of an action plan for improvement based on evidence. The district determined that the major cause for poor reading performance was due to lack of instruction within the general education curriculum for students with disabilities. They also determined that students with disabilities in identified buildings had limited instruction in study skills and test taking strategies.

A district can determine specific reasons for lack of performance by disaggregating the data according to subgroups and avoid a "shot gun" approach to improvement planning. For instance, Mt. Carver could have targeted MAP reading areas needing improvement and implemented interventions to fix every skill in these areas, when in fact not all were a problem. This would have wasted time, energy and other valuable resources.

Ultimately, this district was able to determine through data analysis that increased access to the general education curriculum and effective instructional practices in particular skill areas would most likely result in improved performance for students with disabilities.

The Special Education Vacuum

¹ Demographics, Student Learnings, School Processes, and Perceptions from Victoria L. Bernhardt's *Data Analysis for Comprehensive Schoolwide Improvement*, Eye on Education, Inc. 6 Depot Way West, Larchmont, NY 10538 (1998)

Meyersville, a large urban district, was struggling to understand why they didn't make AYP. Administrators were sure that special education students were the reason. Likewise, the special education director for the district could not disagree knowing that IEP students' scores, even with accommodations, were typically below that of all students. She was told to get the numbers up so the district could make AYP.

After asking some general questions about MAP performance data within the district and at the building level, the special education administrator, organized a multi-disciplinary team and with the help of their Regional Special Education Consultant, determined what types of data might give them the best indicators of why scores of special education students were below expectations. The team determined they needed to drill down the data to look for root causes of low performance in each content area assessed.

The team reviewed aggregate district MAP scores from their Special Education District Profile and disaggregated data from Crystal Reports (special education and all students). They identified subject areas where scores were below "Nearing Proficiency." This provided some precursory information from *school learnings*² data about where students appeared to have the most difficulty in the subject areas. But the question as to why they were struggling remained unanswered. The team looked deeper at the data from *school learnings* to see how students were performing in specific classroom content and what instructional programs and services were being delivered within *school processes*. They also looked at *demographic* data, i.e. staff turnover information in the specific building where scores were the lowest and discipline incidents reports for all students.

They determined from their reviews of data in these areas that instructional support in the reading and language areas were very limited, both at the middle feeder school and the secondary school. They also were able to see that there was a high degree of inconsistency for delivery of instruction due a high staff turnover rate. Additionally, disciplinary incidents removals were high for all students. While the team was not certain that the discipline referrals and removals were a contributing factor, the team was aware that disruption from engagement in classroom learning has negative consequences for all students, but especially for students with disabilities.

As a result of reviewing the data, the team believed the root causes for unacceptable levels of performance on the MAP for students with disabilities was due to needed reading instruction at the middle and secondary level and lack of staffing resources in combination with disciplinary removals. From this information, the team developed an action plan for improvement that incorporated recommendations for a reading program, administrative consideration for reorganization of staff and professional development in Positive Behavioral Supports.

The commonality between these two cases is that evaluation of a special education program and improvement planning can only be effectively addressed by reviewing the data and questioning what the data is revealing. It is imperative to drill down the data to discover the root causes of problems. It takes time and energy to find the root causes, but the effort is integral to making programmatic decisions. As a part of this effort, the data gathering process and subsequent analyses thereof involves looking at multiple measures - demographics, student learnings, school processes and perceptions.

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² Demographics, Student Learnings, School Processes, and Perceptions from Victoria L. Bernhardt's *Data Analysis for Comprehensive Schoolwide Improvement*, Eye on Education, Inc. 6 Depot Way West, Larchmont, NY 10538 (1998)